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THE RELATIONSHIP OF ATHLETES' PARTICIPATION MOTIVES TO GENDER,  
AGE, SKILL LEVEL, AND FREQUENCY OF COMPETITION

by  
Theresa M. Febrey

An Abstract  
of a thesis submitted in partial fulfillment  
of the requirements for the degree of  
Master of Science in the Division  
of Health, Physical Education,  
and Recreation at  
Ithaca College

May 1989

Thesis Advisor: Dr. Deborah Wuest

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## ABSTRACT

This investigation sought to determine the participation motives of youth soccer athletes and the relationship of gender, age, skill level, and frequency of competition to those motives. Subjects ( $N = 180$ ) were youth soccer athletes, ages 11-18 years, that competed in the 1988 fall interscholastic soccer program at identified junior and senior high schools in the Wayne and Monroe counties of New York. Subjects completed the Participation Motives Questionnaire (Gill, Gross, & Huddleston, 1983), which assessed 30 motives for participation in sport, and a personal background questionnaire that assessed information concerning gender, age, and frequency of competition. Coaches were requested to evaluate the skill level of each athlete. Descriptive statistics, factor analysis, and univariate statistical techniques were used in data analysis. Results revealed that the most important motives were fun, skill development, and fitness. Factor analysis results revealed that the motives could be grouped into general factors. The eight factors identified in order of most important to least important were Action-Excitement, Competition, Skill and Fitness Development, Team-Oriented, Achievement Status, Energy Release, Social Status, and Situation. Age was not a significant variable ( $p > .05$ ) in the importance ratings of the participation motives. Gender, skill level, and frequency of competition were significant variables ( $p < .05$ ) in importance ratings of the motives. Males rated the Social Status and Achievement Status factors higher in importance and the Energy Release factor lower in importance than females. The below-average skilled athletes rated the Competition and

Team-Oriented factors lower in importance than the highly-skilled and average-skilled athletes and the Action-Excitement factor lower in importance than the highly-skilled athletes. Athletes who competed only in the fall season rated the Action-Excitement and Achievement Status factors lower in importance than those athletes who competed in additional indoor and summer seasons. These results were interpreted according to the personal factor by situational factor interaction model of motivation and a number of coaching suggestions were outlined.

THE RELATIONSHIP OF ATHLETES' PARTICIPATION MOTIVES TO GENDER,  
AGE, SKILL LEVEL, AND FREQUENCY OF COMPETITION

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A Thesis Presented to the Faculty of  
the Division of Health, Physical  
Education, and Recreation  
Ithaca College

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In Partial Fulfillment of the  
Requirements for the Degree  
Master of Science

---

by  
Theresa M. Febrey  
May 1989

Ithaca College  
Division of Health, Physical Education, and Recreation  
Ithaca, New York

CERTIFICATE OF APPROVAL

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MASTER OF SCIENCE THESIS

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This is to certify that the Master of Science Thesis of  
Theresa M. Febrey

submitted in partial fulfillment of the requirements for the degree  
of Master of Science in the Division of Health, Physical Education,  
and Recreation at Ithaca College has been approved.

Thesis Advisor:

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Dean of Graduate  
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## Chapter 1

### INTRODUCTION

Although sport is already a well-established social institution, it continues to become an increasingly integral part of Western culture. Not only does the phenomenon of sport encompass a vast number of people, it has penetrated all levels of society as evidenced by the increasing popularity of organized youth sports. Nationally, over 30 organizations, such as Little League of America and Pop Warner Football, promote and develop youth sport opportunities (Martens, 1978). On the regional and local levels, thousands of additional opportunities are offered through religious organizations (Young Men's Christian Association and Catholic Youth Organization), community service clubs (Kiwanis and Veterans of Foreign Wars), and community parks and recreation programs (Berryman, 1978; Martens, 1978; Seefeldt, 1978).

Currently, it is estimated that 20 million children, ages 6-16 years, participate in a variety of organized sport programs in North America (Gould, Feltz, Horn, & Weiss, 1982; Magill, Ash, & Smoll, 1978; Martens, 1978). Of these, 10 million are under the age of 14 (Martens & Seefeldt, 1979) and approximately 7 million are girls (Gill, Gross, & Huddleston, 1983). Studies indicate that these children, grades 2-5, average 5.13 hr per week in organized sport (Magill & Ash, 1979) while older children average 12 hr per week during an 18-week season (Gould & Martens, 1979). In addition to the large number of children participating, 1.5-2.5 million adults are

actively involved as coaches, officials, and administrators in these programs (Martens, 1978; Martens & Seefeldt, 1979).

As youth sport has continued to grow since its inception in 1903 (Berryman, 1978), sport psychology research in youth sport has continued to progress as well. Specifically, the need for research in the area of participation motives for youth sport participants has recently gained much attention. Gould (1982) surveyed sport psychologists, coaches, and administrators on 29 psychological issues in youth sports and found the two issues of why children participate and why they discontinue participation to be two of the greatest concerns in youth sports. Gill et al. (1983) stated that the Youth Sport Institute at Michigan State University has motives for joining and discontinuing youth sports as its highest research priority. Additionally, with the estimated youth sport attrition rate between 22-37% (Klint & Weiss, 1986), it is clear that participation motives should become a research priority.

Information generated from participation motives research could be used as a guide for coaches to structure their methods to ensure that their athletes are motivated for continued participation. Weinberg (1981) suggested that motivation is an important determinant in an athlete's continued participation in youth sports. Further, level of motivation is the result of the interaction between personal factors and situational factors. Participation motives research would be beneficial in highlighting the critical situational factors coaches could manipulate to increase their athletes' motivation for continued participation. Personal factors could be highlighted to enable the coaches to adjust

their coaching style to better meet the needs of their athletes' personalities and increase their athletes' motivation for continued participation. It is hoped that increasing athletes' motivation for continued participation will increase the length of the athletes' careers and decrease the attrition rate.

Gill et al. (1983) developed the Participation Motives Questionnaire (PMQ) to identify participation motives for youth sport participants. Studies have used the PMQ to identify participation motives for a variety of youth sports, such as gymnastics and swimming, and their relationship to such variables as gender, intensity of participation, years of experience, skill level, and age (Gill et al. 1983; Gould, Feltz, & Weiss, 1985; Klint & Weiss, 1986). This investigation attempted to discover the participation motives of youth soccer athletes and the relationship of gender, age, skill level, and frequency of competition to these motives.

#### Scope of Problem

This investigation sought to determine the participation motives of youth soccer athletes and the relationship of gender, age, skill level, and frequency of competition to those motives. Selected junior and senior high schools located in the Wayne and Monroe counties of New York that provide a fall interscholastic soccer program, a winter indoor program, and a summer recreational program were identified. Youth soccer athletes, ages 11-18 years, that competed in the 1988 fall interscholastic programs of these identified schools were asked to volunteer as subjects for this investigation. Subjects ( $N = 180$ ) were administered the PMQ and a personal background questionnaire (PBQ).

The PMQ assessed 30 motives children have for participating in soccer. The 6-item PBQ assessed chronological age in years, gender, frequency of soccer competition, years of soccer competition, and history of other sport competition. Descriptive statistics, exploratory factor analysis, and univariate statistical techniques were used in data analysis.

### Statement of Problem

This investigation sought to determine the participation motives of youth soccer athletes and the relationship of gender, age, skill level, and frequency of competition to those motives. The 30 motives assessed by the PMQ (Gill et al., 1983) were the dependent variables. Gender, age, skill level, and frequency of competition were the independent variables. Data collected in this investigation were used to determine the participation motives for youth soccer athletes and the relationship of gender, age, skill level, and frequency of participation to those motives.

### Hypotheses

The following hypotheses were tested for the purpose of this investigation:

1. There will be no significant gender differences in participation motives.
2. There will be no significant age differences in participation motives.
3. There will be no significant skill level differences in participation motives.
4. There will be no significant frequency of competition differences in participation motives.

### Assumptions of Investigation

The following assumptions were made for the purpose of this investigation:

1. The subjects followed the directions given for completing the questionnaires.
2. The subjects responded truthfully to the questionnaires.
3. The mental capabilities of the subjects were within the normal range for children of those ages.

### Definition of Terms

The following terms were operationally defined for the purpose of this investigation:

1. Skill level: Skill was assessed on a 3-point rating scale (1 = highly-skilled athlete, 2 = average-skilled athlete, 3 = below-average skilled athlete).

(a) Highly-skilled athlete (HSA): The athlete plays 75-100% of a game and must be a starter. The athlete has or will be receiving skill recognitions such as All-County, most valuable player, State Select, or Empire State Games participant.

(b) Average-skilled athlete (ASA): The athlete plays 25-74% of a game and may or may not be a starter. The athlete has not or will not be receiving skill recognitions.

(c) Below-average skilled athlete (BAA): The athlete plays less than 25% of a game and has not or will not be a starter.

2. Participation motives: The reasons a child has for participating in sport.

3. Youth soccer athlete: Male and female children, ages 11-18



years, from identified junior or senior high schools that participated in the 1988 fall interscholastic soccer program.

4. Frequency of competition: The number of soccer programs an athlete competed in during the calendar year. This was categorized by one program, two programs, or three programs.

(a) One program: The athlete only competed in the fall interscholastic soccer program

(b) Two programs: The athlete competed in the fall interscholastic program and in either the winter or summer program.

(c) Three programs: The athlete competed in the fall, winter, and summer programs.

#### Delimitations of Investigation

The following delimitations were made for the purpose of this investigation:

1. The investigation involved only male and female soccer athletes, ages 11-18 years, that had the opportunity to participate during a fall interscholastic, a winter indoor, and a summer recreational soccer programs.

2. The investigation measured only the 30 participation motives as assessed by the PMQ.

3. Only 180 subjects from the Wayne and Monroe counties of New York participated in this investigation.

#### Limitations of Investigation

The following limitations were made for the purpose of this investigation:

1. Results of this investigation can only be generalized to youth

soccer athletes who are similar to those in the investigation.

2. Results are only relevant to the motives assessed by the PMQ.
3. Results are only generalizable to athletes from similar size communities and geographic location of these subjects.

## Chapter 2

### REVIEW OF RELATED LITERATURE

The review of related literature for this investigation will focus on the following areas: (a) motivation as an interactional process, (b) cognitive evaluation theory, (c) participation motives research, and (d) summary.

#### Motivation as an Interactional Process

Currently, it is estimated that 20 million children, ages 6-16 years, participate in organized sport programs in North America (Gould, Feltz, Horn, & Weiss, 1982; Magill, Ash, & Smoll, 1978; Martens, 1978). However, the estimated attrition rate of youth sport participants is 22-37% (Klint & Weiss, 1986). Weinberg (1981) suggested that for youth sport participants, motivation is an important determinant in their continued participation. To reverse the current attrition rate, coaches need to develop an understanding of the role motivation plays in continued participation for young athletes.

The most current thinking in the general psychological literature suggests that behavior is the result of the continuous interaction between the person and the situation in which he/she is placed (Alderman, 1978; Weinberg, 1981). This interactional model can assist coaches in understanding the process involved in motivating young athletes. Specifically, Weinberg (1981) interpreted this model to suggest that the athlete's level of motivation is determined by this interaction of personal factors (personality) and situational factors (environment).

In using this model to effectively motivate their athletes, coaches must be able to identify the situational factors involved and must understand how to manipulate these factors to increase their athletes' motivation in the sport environment. Alderman (1978) described these situational factors in two distinct ways. First, situations can be described in objective terms that focus on the real or actual physical and social stimuli of the situation. Physical features, such as the stadium or the pool itself, have the potential to motivate the athletes. Social stimuli, such as spectators and opponents, can potentially motivate the athletes as well.

Second, situations can be described in terms of the athlete's subjective perception of the psychological stimuli inherent in the situation. Specifically, how does the athlete perceive himself/herself in relationship to the situation (e.g., experienced, skilled, or unsuccessful), and how does the athlete perceive the situation itself (e.g., threatening or challenging)? Further, what expectancies does the athlete attach to the situation and its outcome (e.g., win or lose), and what incentive value does the athlete attach to the potential outcomes of the situation (e.g., a high incentive value) (Alderman, 1978)?

Coaches can manipulate many of these situational factors to increase an athlete's level of motivation. For example, coaches of youth soccer athletes can increase motivation by reducing the actual size of the physical features involved (e.g., the field, the goal, and the ball). This would decrease the chances of the athletes negatively perceiving the situation (an 8-ft. high soccer goal) and themselves in relationship to the situation (an 8-year-old goalie defending this 8-ft.

goal). Another example would be to schedule the games at a time that would allow for the greatest number of spectators (social stimuli) to attend.

Coaches must also be able to identify the personal factors involved and must understand how to adjust their coaching styles to better meet the needs of their athletes' personalities. Some important personal factors coaches need to consider are the athletes' personalities, interests, attitudes, and needs. Because of their varied backgrounds, the athletes will bring to the sport environment their own unique set of personal factors. Consequently, the coach can expect each athlete to react differently to a specific situation. For example, those athletes with strong social needs may be more motivated in a practice session, whereas those with strong competitive needs may be more motivated in a game (Alderman, 1978). For coaches to effectively motivate their athletes, they need to understand each of their athletes' personalities and adjust their styles accordingly.

To effectively motivate their athletes, coaches need to bear in mind that level of motivation is the result of the interaction between personal factors and situational factors. Consequently, it is important for coaches to identify and manipulate situational factors and to recognize personal factors and adjust their coaching styles accordingly to increase their athletes' level of motivation for continued participation.

### Cognitive Evaluation Theory

The cognitive evaluation theory can further enhance a coach's understanding of the relationship between motivation and continued

participation. Deci (1975) stated that intrinsically motivated behavior is based in a person's needs for perceived competence and self-determination. Perceived competence can best be described in terms of perceived level of ability. Athletes will seek out and persist in optimally challenging activities that provide opportunities for success and provide accurate, self-enhancing feedback concerning level of ability (Gerson, 1977; Kleiber, 1981; Weinberg, 1981; Weinberg & Jackson, 1979). Self-determination can best be described in terms of perceived locus of causality. Self-determined athletes perceive themselves as having an internal locus of control, that is, they view themselves as being the cause of or in control of their own behavior (Alderman, 1978). Conversely, those athletes with a perceived external locus of causality view external factors such as rewards, high task difficulty, and luck as being the cause of or in control of their behavior (Vallerand, Deci, & Ryan, 1987; Weinberg & Jackson, 1979).

Cognitive evaluation theory contends that any event that affects peoples' perceptions of competence and self-determination can potentially affect their intrinsic motivation. Further, all events have two aspects: a controlling aspect and an informational aspect.

Controlling events can be described as those occurrences that pressure an athlete toward a specific outcome. These events cause a shift in locus of causality from internal to external, which negatively affects perceived self-determination. Consequently, the athlete will experience a decrease in intrinsic motivation (Vallerand et al., 1987). These events can be external, such as money, prizes, and verbal feedback from the coach, or internal, such as guilt, fear, and ego

involvement (Ryan, Vallerand, & Deci, 1984).

An external controlling event would be a father paying his child (e.g., a beginning goaltender) each time a successful save is made. This goaltender becomes motivated to perform by the external controlling event of payment. Removal of this controlling event (payment) could cause a shift in locus of causality from internal (i.e., the goaltender's save determines payment) to external (i.e., the father determines payment regardless of goaltender's behavior) and a decrease in intrinsic motivation. Typically, the athlete will cease to continue participation once the payment has been removed (Halliwell, 1978). Internal events have essentially the same effect. For example, those runners who are motivated by guilt to run every day will cease to run once the guilt is removed.

Informational events provide accurate feedback concerning the athlete's perceived competence (Vallerand et al., 1987). Positive feedback enhances and negative feedback undermines perceived competence and, ultimately, intrinsic motivation. These events can be external, such as awards and verbal reinforcement from the coach, or internal, such as positive feelings after a successful performance (Alderman, 1978; Ryan et al., 1984). It is important to note that feedback can only affect perceived competence if the athlete feels self-determined (i.e., a coach's compliment on an athlete's performance will enhance perceived competence only if the athlete feels he/she was the cause of his/her own behavior) (Ryan et al., 1984).

An example of an external informational event would be an award based on the quality of performance (e.g., most valuable player) rather

than the outcome of performance (e.g., first place trophy). The award based on the quality of performance would give the athletes valuable positive feedback concerning their level of ability. This type of award would enhance perceived competence and, ultimately, intrinsic motivation.

The athlete's perception of an event is as important as the event itself in determining whether it is controlling or informational (Halliwell, 1978). If the award itself is informational but the award recipient perceives it as controlling, then the award is actually controlling in this case. Additionally, Vallerand et al. (1987) stated that females tend to perceive positive feedback as controlling while males typically perceive the feedback as informational.

The cognitive evaluation theory has several implications for coaches concerning their development of strategies for motivating athletes. In enhancing self-determination, coaches should create a democratic atmosphere (Alderman, 1978; Vallerand et al., 1987). In creating this atmosphere, coaches could have group discussions and group consensus in the development of team goals. Coaches could also encourage their athletes to bring drills to practice, to lead various segments of the practices, and to have input in the development of game plans (especially older, more experienced players) (Alderman, 1978; Halliwell, 1978; Weinberg, 1981). Strategies such as these will enhance the athletes sense of responsibility, autonomy, and internal locus of control, and, ultimately, intrinsic motivation.

There are several strategies coaches can use to enhance perceived competence. One important strategy is to create opportunities for all



the athletes to experience success. It is important to note that males find success more intrinsically motivating than females (Weinberg & Ragan, 1979) and that athletes find non-competitive situations more intrinsically motivating than competitive situations (Vallerand et al., 1987). With this in mind, Gerson (1977) recommended that coaches develop self-testing situations that provide success and accurate feedback concerning level of ability. For example, coaches can develop juggling skills by instructing their athletes to juggle as many times as possible in 1 min. Coaches then challenge their players to increase their total number of juggles by one during the next 1-min trial. This is a relatively non-competitive situation as the athletes compete only within themselves and not against teammates. Increasing the number of juggles by one is a goal that most athletes can obtain, however, coaches can ensure success by going slightly over the 1 min time limit to enable all athletes to obtain this goal. Coaches may wish to repeat this challenge more frequently with males, who tend to be more motivated by success, than with females (Weinberg & Ragan, 1979).

In enhancing perceived competence, coaches must take great care in controlling the level of difficulty for their athletes. Coaches can adapt the length of the game, the rules, the number of players involved, and the sizes of the field, the goal, and the ball to ensure success for all of their athletes. Further, the coaches can also control the level of difficulty of their schedule to ensure opportunities for success for their athletes.

Coaches must also take great care in the use of rewards so as not

to shift the athletes' locus of causality from internal to external. First, it is recommended that coaches reward participation rather than outcome of participation (Orlick & Botterill, 1975). Second, rewards should be informative (i.e., provide accurate, positive feedback concerning level of ability) rather than controlling (i.e., manipulate athletes toward a specific outcome) (Vallerand et al., 1987; Weinberg, 1981). Third, it is important that coaches get to know their athletes well enough to understand if their athletes will perceive a reward as controlling or informative (Halliwell, 1978). Finally, coaches can limit the use of external rewards as these tend to shift locus of causality from internal to external.

There are a variety of strategies coaches can employ to enhance perceived competence and self-determination and, ultimately, intrinsic motivation. Coaches need to develop an understanding of the cognitive evaluation theory in order to use these strategies effectively in motivating their athletes for continued participation.

#### Participation Motives Research

Participation motives research highlights specific motives or reasons for participation that coaches should create or reinforce in the sport environment. Consequently, information generated from participation motives research can be used as a guide for coaches to structure their coaching methods to ensure that their athletes are motivated for continued participation. Early research in this area focused on assessment of attitude toward physical activity. Although several studies using a variety of techniques appeared in the literature, they generally suffered from three major shortcomings (Kenyon, 1968).

First, researchers usually limited their inquiries to just physical education classes and competitive sport teams rather than exploring physical activity in its broadest sense. Second, the instruments used in assessment were rarely developed according to appropriate test construction procedures. Third, testing procedures failed to account for the multidimensionality of physical activity.

Kenyon (1968), in an attempt to allieviate these shortcomings, proposed a conceptual framework based on the function physical activity serves in society. His first step was to reduce the broad domain of physical activity to six subdomains and construct individual scales to assess each of the subdomains. These six subdomains were as follows:

1. Physical activity as a social experience (means of meeting social needs).
2. Physical activity for health and fitness (means of enhancing personal health).
3. Physical activity as the pursuit of vertigo (means of experiencing excitement and risk).
4. Physical activity as an aesthetic experience (means of experiencing beauty).
5. Physical activity as catharsis (means of releasing tension).
6. Physical activity as an ascetic experience (means of providing a competitive experience).

Finally, he tested a large group of secondary school students using these scales and found that physical activity as a social experience had the strongest meaning for them.

Kenyon's model proved useful in a number of ways. Previously, it

was thought that achievement was the primary motivator for participation in sport (Alderman, 1978). Kenyon's model demonstrated that there are a variety of reasons for participation in sports or physical activities. Further, Kenyon's (1968) study and two follow-up studies by Alderman (1970) and Smoll and Schutz (1980) revealed that participants were more interested in physical activity as a social experience and as an aesthetic experience than as a means for achievement. Finally, Sonstroem and Kampper (1980), in a follow-up study on middle school boys, found Kenyon's scales useful in predicting whether or not a person would actually participate in physical activity or sport.

Although Kenyon's model did shed considerable light on the multidimensionality of physical activity and was useful in predicting the likelihood of a person participating in physical activity, it had one major shortcoming. This model could not answer the question of why athletes participate in physical activity or sport. In an attempt to answer this question, researchers began to investigate the area of participation motives.

In an attempt to answer this question, Weick (1975) sought to discover the participation motives of college men and women with the use of her own testing instrument. Weick found that both men and women rated having fun and getting regular exercise as the most important motives for participation. Weick also discovered some gender differences in the importance of these motives. Women rated the motives of making new friends and controlling weight higher than men, and men rated improving self-confidence and experiencing success

or achievement higher than females.

McPherson, Marteniuk, Tihanyi, and Clark (1980) sought to discover the participation motives of age group swimmers with the use of their own testing instrument. They discovered that the most important motives for all swimmers were to learn to swim better, to have fun, to learn discipline, and to learn to cope with stress.

Although both studies were an important first step in highlighting the most important participation motives, both suffered from two major shortcomings. First, these studies failed to extend or develop a specific psychological theory concerning participation motives. Second, the researchers did not use a standardized testing instrument. Fortunately, research in participation motives is now based on psychological theory and uses standardized testing instruments.

Current research in participation motives has been guided by the theoretical model developed by Birch and Veroff (1966). They asserted that behavior was directed by the seven major motive-incentive systems of sensory, aggression, achievement, affiliation, curiosity, power, and independence. Alderman and Wood (1976) modified this model for sport.

The seven major motive-incentive systems for sport developed by Alderman and Wood (1976) were:

1. Independence: The incentives that revolve around the opportunity to do things on one's own without criticism or help.
2. Power: The incentives that revolve around the opportunity to control and influence other people.
3. Affiliation: The incentives that revolve around the

opportunity to attain, maintain, and consolidate personal relationships with others.

4. Arousal: The incentives that revolve around the opportunity for stress, excitement, and interesting experiences.

5. Esteem: The incentives that revolve around the opportunity for prestige, recognition, status, and social approval.

6. Excellence: The incentives that revolve around the opportunity for being very good at something or for being better than anyone else at something, for its own sake.

7. Aggression: The incentives that revolve around the opportunity to subdue, intimidate, injure, or dominate other people.

Alderman and Wood developed their own testing instrument based on this model and tested a group of male (ages 11-14 years) hockey players from Canada. They found the most salient incentive systems for this group to be affiliation, excellence, and arousal. Also of interest, they found the independence and aggression systems to be lesser in importance for this group. They also found that while the systems were relatively independent of each other, they did amalgamate to produce combinations of systems.

Alderman and Wood made considerable strides in participation motives research by basing their study on Birch and Veroff's (1966) theoretical model. However, disappointing reliability figures for their testing instrument further highlighted the need for a reliable, standardized testing instrument for the assessment of participation motives.

Gill, Gross, and Huddleston (1983) sought to develop a

standardized instrument for the assessment of participation motives. Gill et al. initially developed the Participation Motives Questionnaire in a pilot study at the University of Waterloo. The members of an undergraduate sport psychology class interviewed 1500 participants in youth sports (adults and children) in developing a 37-item questionnaire for assessment of participation motives. The questionnaire was administered to a group of male and female youth soccer participants and modifications were made. The final result was the 30-item Participation Motives Questionnaire (PMQ) used in the current study.

In the study by Gill et al. (1983), the PMQ was administered to males and females at the Iowa Summer Sports School to examine gender differences in participation motives. Results revealed that both males and females gave the highest ratings to the motives to improve skills, to have fun, to learn new skills, to be physically fit, and likes the challenge. Minor gender differences were observed. Males rated the motive likes the challenge higher in importance, and females rated the motive to have fun higher in importance. The motives that were rated as least important were to get rid of energy, to travel, to release tension, to be popular, and parents or friends want me to play. Again, gender differences were observed as males rated the motive to get rid of energy higher in importance, and females rated the motives to be popular and parents or friends want me to play higher in importance.

Gill et al. then used factor analysis to determine whether these 30 individual motives could be grouped into general categories or factors of motives. The results yielded the eight factors of Achievement Status,

Team-Oriented, Fitness-Oriented, Energy Release, Friendship, Fun, Situation, and Skill Development. Both males and females rated the factors of Skill Development and Fun as most important and the factors of Energy Release and Situation as least important. Gender differences were observed. Males rated the Achievement Status factor higher in importance, and females rated the Fun factor higher in importance. Generally, these results were similar to those found by Alderman and Wood (1976).

The use of the questionnaire itself revealed no problems in format or administration, and it was easily understood by the subjects. Psychometric testing revealed that the internal consistencies of the factors were generally good with the Achievement Status, Team-Oriented, and Fitness-Oriented factors showing especially high reliabilities. The results from factor analysis were positive in that the motives grouped together into distinct and logical factors.

In a follow-up study using the PMQ, Gould, Feltz, and Weiss (1985) examined participation motives and the relationship of these motives to gender, age, ability, and level of experience for competitive youth swimmers (ages 8-19 years). Factor analysis revealed the seven factors of Achievement Status, Team Atmosphere, Excitement-Challenge, Fitness, Energy Release, Skill Development, and Friendship. Those factors rated highest in importance were Fitness, Team Atmosphere, and Skill Development, respectively. Generally, these results were very similar to those of Gill et al. (1983) with the exceptions being that no Situation factor was revealed and that the



motive to have fun did not load onto a factor. It is important to note that the motive to have fun was rated highest in importance by the swimmers.

Gould et al. (1985) observed differences in participation motives based on gender, age, and years of experience, and no differences based on ability. The results revealed that females rated the factors of Fitness and Friendship and the motives to have fun and to have something to do higher in importance than males. The youngest age group (8-11 years) rated the factor of Achievement Status and the motives to have something to do, likes the coach, parents or close friends want me to play, and to use the facilities higher in importance than the oldest age group (15-19 years). It is important to note that there were no observed differences in factors for swimmers ages 12-14 and 15-19 years. Those swimmers with less than 1 year of experience rated the Skill Development factor higher in importance than the other two groups of experienced swimmers (2 to 4 years and over 5 years of experience).

In another follow-up study using the PMQ, Klint and Weiss (1986) sought to compare the participation motives of competitive, recreational, and drop-out gymnasts, and to compare participation motives to attrition motives. The results of factor analysis revealed the seven factors of Competition, Action, Fitness, Team Atmosphere, Situation, Social Recognition, and Challenge. Generally, these factors were very similar to those found by Gill et al. (1983) and Gould et al. (1985), with the most notable difference being the lack of a Friendship factor. Also interesting to note was that the motive to have fun loaded onto two factors (Team and Situation).

Klint and Weiss observed differences in participation motives between the three groups of gymnasts. Results revealed that the competitive gymnasts rated the Competition and Fitness factors and the motive to improve skills higher in importance than the drop-out gymnasts. The competitive gymnasts also rated the Competition factor higher in importance than the recreational gymnasts. Further, the recreational gymnasts rated the Situation and Fitness factors higher in importance and the Competition and Action factors lower in importance than the drop-out gymnasts.

Klint and Weiss also compared participation motives to attrition motives and found no significant relationship between the two sets of motives. Gould, Feltz, Horn, and Weiss (1982), in a similar study of attrition motives, also found no significant relationship between participation and attrition motives. Consequently, it appears that attrition can not be explained by a lack of or reversal of participation motives. These findings demonstrated the need to examine participation motives separately from attrition motives.

Results from studies using the PMQ (Gill et al., 1983; Gould et al., 1985; Klint & Weiss, 1986) were supportive of the theoretical model proposed by Alderman and Wood (1976) which theorized that motives could be grouped into systems or categories. Passer (1981) summarized these studies by suggesting that participation motives for youth sport participants can be grouped into six major categories or factors of motives as follows:

1. Affiliation: This could be divided into two factors reflecting team atmosphere and friendship.

2. Excitement: This factor includes such motives as action, challenge, novelty, and interesting activities.
3. Skill Development: This factor includes such motives as to improve or learn new skills, and to be good at something.
4. Energy Release: This factor includes such motives as to get rid of energy and to release tension.
5. Success and Status: This factor includes such motives as to win, to gain rewards, to gain recognition, and to feel important.
6. Fitness: This factor includes such motives as to stay in shape, to get exercise, and to be physically fit.

To rank these factors in terms of importance is difficult as one must consider the individual differences of youth sport participants. Passer (1981) generally concluded that, with the exception of Energy Release, all of these categories of motives are important determinants of sport participation. These studies also indicated that the most important individual motives for participation are fun, skill development, fitness, and friendship (Henschen, 1986; Ogilvie & Howe, 1986). Further, though a few differences based on gender, age, years of experience, and level of competition were discovered (Gill et al., 1983; Gould et al., 1985; Klint & Weiss, 1986), the general pattern of motives was quite similar for all athletes (Passer, 1981).

### Summary

Currently, an estimated 20 million children participate in organized youth sport programs in North America (Gould et al., 1982; Magill et al., 1978; Martens, 1978). However, the estimated attrition rate of youth sport participants is 22-37% (Klint & Weiss, 1986).

Weinberg (1981) suggested that motivation is an important determinant in the athlete's continued participation. Further, level of motivation is a result of the continuous interaction between the athlete (personal factors) and the environment (situational factors). Consequently, for coaches to effectively motivate their athletes for continued participation they need to be able to identify and manipulate situational factors and to recognize and to adjust their coaching styles to personal factors to increase their athlete's level of motivation for continued participation.

The cognitive evaluation theory can further enhance a coach's understanding of the relationship between motivation and continued participation. This theory contends that intrinsically motivated behavior is based in a person's needs for perceived competence and self-determination (Deci, 1975). Consequently, any event which affects a person's perception of competence and self-determination can affect their intrinsic motivation. Further, all events have two aspects: a controlling aspect (i.e., manipulates an athlete toward a specific outcome) and an informational aspect (i.e., provides accurate feedback on level of ability). Coaches can use their understanding of the cognitive evaluation theory to develop a variety of strategies for the enhancement of their athletes' motivation for continued participation.

Participation motives research highlights specific motives or reasons for participation that coaches should create or reinforce in the sport environment. Subsequently, information generated from participation motives research can be used as a guide for coaches to structure their coaching methods to ensure that their athletes are

motivated for continue participation. Initial research investigated attitude toward physical activity (Alderman, 1970; Kenyon, 1968; Smoll & Schutz, 1980; Sonstroem & Kampper, 1980). Though this research could not be used to answer the question of why athletes participate, it was useful in defining the multidimensionality of physical activity.

Researchers, using the seven major motive-incentive systems model proposed by Birch and Veroff (1966) and modified for sport by Alderman and Wood (1976), have begun to examine the question of why athletes participate in organized youth sport. Information generated from participation motives research indicated that the most important motives for participation are fun, skill development, fitness, and friendship (Henschen, 1986; Ogilvie & Howe, 1986; Scanlan & Passer, 1980).

Passer (1981) summarized participation motives research by suggesting that motives for participation can be grouped into six categories or factors of motives as follows: Affiliation, Excitement, Skill Development, Energy Release, Fitness, and Success and Status. Passer concluded that with the exception of Energy Release, all of these categories are important determinants of sport participation. Further, though a few differences based on gender, age, years of experience, and level of competition were discovered (Gill et al., 1983; Gould et al., 1985; Klint & Weiss, 1986), the general pattern of motives is quite similar for all athletes (Passer, 1981).

In conclusion, coaches can use their understanding of the interactional process of motivation, the cognitive evaluation theory,

and the information generated by participation motives research as a guide for developing strategies for motivating their athletes for continued participation.

## Chapter 3

### METHODS AND PROCEDURES

This chapter will outline the methods and procedures used in gathering data for this investigation. The chapter is divided into the following sections: (a) selection of subjects, (b) testing instruments, (c) method of data collection, (d) scoring of data, (e) treatment of data, and (f) summary.

#### Selection of Subjects

Selected junior and senior high schools located in the Wayne and Monroe counties of New York that provide a fall interscholastic soccer program, a winter indoor program, and a summer recreational program were identified. Youth soccer athletes, ages 11-18 years, that competed in the 1988 fall interscholastic programs of these identified schools were asked to volunteer as subjects for this investigation ( $N = 180$ ). Permission was obtained from the principals to have this investigation conducted in their schools (Appendix A). Informed consent forms explaining the purpose, procedures, and confidentiality of the investigation were distributed to and signed by the coach and a parent prior to the athlete's signing of the informed consent form (Appendixes B, C, & D).

#### Testing Instruments

The Participation Motives Questionnaire (PMQ) (Gill, Gross, & Huddleston, 1983) and a personal background questionnaire (PBQ) were administered to the subjects. The coaches were requested to evaluate the skill level of each athlete.

The PMQ assesses 30 separate motives that children have for participating in sports (Appendix E). The Likert scale was modified from the original 3-point scale to a 5-point scale to increase variability (M. R. Weiss, personal communication, July, 1988). The 5-point scale was as follows: 5 = very important, 4 = important, 3 = a little important, 2 = not very important, and 1 = not important at all. For the purpose of this investigation, the directions for the PMQ were modified to instruct participants to rate on a scale of 1 to 5 the importance of each motive as it pertains specifically to soccer. Gould, Feltz, and Weiss (1985) established a test-retest reliability of .68 for the PMQ.

The PBQ consists of six items assessing chronological age in years, gender, frequency of soccer competition, years of soccer competition, and history of other sport competition (Appendix F).

Coaches recorded a skill level rating for each player on a team roster and returned this to the researcher prior to the testing date. Subjects were not aware of this rating procedure. The skill level rating was based on a 3-point scale as follows:

1 - Highly-skilled athlete (HSA): The athlete plays 75-100% of a game and must be a starter. The athlete has or will be receiving skill recognitions, such as All-County, most valuable player, State Select, or Empire State Games participant.

2 - Average-skilled athlete (ASA): The athlete plays 25-74% of a game and may or may not be a starter. The athlete has not or will not be receiving skill recognitions.

3 - Below-average skilled athlete (BAA): The athlete plays less



than 25% of a game and has not or will not be a starter.

### Method of Data Collection

The researcher met individually with principals to obtain permission to conduct this investigation in their schools. The purpose, procedures, and confidentiality of the investigation were explained at this meeting.

The researcher met individually with the coaches of the teams to explain the purpose, procedures, and confidentiality of the study. The coaches signed informed consent forms giving their consent to participate and allowing the researcher to ask their athletes to volunteer as subjects. The coaches then received instruction on testing procedures and skill rating procedures. Coaches were instructed to meet with subjects to inform them of the purpose, procedures, and confidentiality of the investigation, to announce the testing date and site, and to distribute parental informed consent packets.

Subjects were instructed by their coaches to deliver parental consent packets to their parents, discuss their participation with their parents, and return signed packets to their coaches. At the testing site, each subject received a packet containing an informed consent form, the PMQ, the PBQ, and a pencil. The purpose, procedures, and confidentiality of the investigation were explained and informed consent forms were signed by subjects. Those not wishing to participate returned the packets to their coaches and returned to the gym for an alternate indoor soccer activity. Upon completion of the questionnaires, subjects placed the informed consent form and the questionnaires in their envelopes, printed their names on the envelopes, and returned the packets to their coach. Upon completion of testing,

the coaches returned all data to the researcher.

#### Scoring of Data

Skill level ratings were transferred to the questionnaires, and subject numbers were assigned before the data were entered into the computer. All PMQ and skill level data were submitted for treatment, and only the first four items of the PBQ were submitted for treatment. The remaining two items of the PBQ were stored for future use.

#### Treatment of Data

The means and standard deviations for each of the 30 motives were calculated and motives were rank ordered by their means. Exploratory factor analysis (D. Bromberg, personal communications, April, 1989; Kim & Mueller, 1982) was used to group the motives into general categories or factors of motives. Principal components analysis with varimax factor rotations were performed to identify factors with an eigenvalue  $\geq 1.0$  (D. Bromberg, personal communications, April, 1989).

Univariate statistical techniques were used to determine the relationships of the identified factors to the variables of gender, age, skill level, and frequency of competition. In all instances, the .05 level was set for the acceptance of significance.

#### Summary

Selected junior and senior high schools located in the Wayne and Monroe counties of New York that provide a fall interscholastic soccer program, a winter indoor program, and a summer recreational program were identified. Youth soccer athletes, ages 11-18 years, that competed in the 1988 fall interscholastic programs of these identified

schools were the subjects ( $N = 180$ ) for this investigation. Coaches administered the PMQ and the PBQ to the subjects, rated each subject's soccer skill level, and then returned the data to the researcher.

The means and standard deviations for each of the 30 motives were calculated, and the motives were ranked by their means. Exploratory factor analysis was used to group the motives into factors of motives. Univariate statistical techniques ( $p < .05$ ) were used to determine the relationships of the individual factors to gender, age, skill level, and frequency of competition.

## Chapter 4

### ANALYSIS OF DATA

The results of the investigation are presented in this chapter. The chapter is divided into the following sections: (a) motive analysis, (b) factor analysis, (c) gender analysis, (d) age analysis, (e) skill level analysis, (f) frequency of competition analysis, and (g) summary.

#### Motive Analysis

The first step in the analysis of data was to calculate the mean ratings of the 30 motives with very important scored as 5, important as 4, a little important as 3, not very important as 2, and not important at all as 1. Motives were then ranked from highest to lowest based upon their mean ratings.

Results are given in Table 1. The mean ratings ranged from 4.58 (I like to have fun) to 2.37 (my parents or close friends want me to play). The five most most highly rated motives were to have fun, to stay in shape, to be physically fit, to improve skills, and to experience excitement. The five lowest rated motives were to travel, to release tension, to be popular, to get rid of energy, and parents or close friends want me to play.

#### Factor Analysis

The next logical step was to bring the investigation beyond the descriptive level by identifying general categories or factors of participation motives through the use of exploratory factor analysis (D. Bromberg, personal communication, April, 1989; Kim & Mueller,

Table 1  
Means, Standard Deviations, and Rank Order of Motive Ratings

Motive Rank	<u>M</u>	<u>SD</u>
I like to have fun.	4.58	.55
I want to stay in shape.	4.50	.72
I want to be physically fit.	4.46	.80
I want to improve my skills.	4.43	.71
I like the excitement.	4.42	.72
I like the action.	4.41	.74
I want to compete.	4.40	.70
I like the team work.	4.35	.68
I like the challenge.	4.34	.69
I want to learn new skills.	4.33	.77
I like to get exercise.	4.30	.83
I like being on a team.	4.28	.70
I like the team spirit.	4.27	.80
I want to go to a higher level.	4.14	.96
I want to do something I'm good at.	4.08	.86

Table 1 (continued)

Motive Rank	<u>M</u>	<u>SD</u>
I like to win.	3.83	.96
I like to have something to do.	3.75	1.00
I like the coaches or instructors.	3.61	1.09
I like to meet new friends.	3.54	1.03
I like to feel important.	3.45	.99
I want to be with my friends.	3.54	1.04
I like the rewards.	3.44	1.18
I want to gain status or recognition.	3.31	1.17
I like to get out of the house.	3.05	1.32
I like to use the equipment or facilities.	3.04	1.15
I like to travel.	2.90	1.26
I want to release tension.	2.82	1.03
I want to be popular.	2.64	1.21
I want to get rid of energy.	2.62	1.15
My parents or close friends want me to play.	2.37	1.29

1982). Principal components analysis with varimax factor rotations were performed, and eight factors of motives with an eigenvalue greater than 1.0 were identified. Factor weights ( $\geq .45$ ), eigenvalues, and percentages of variance for the factors are given in Table 2 (for clarity, only factor weights  $\geq .45$  are given).

A priori decision was made concerning motives that had factor weights  $\geq .45$  on two factors. If the motive did not have a factor weight  $\geq .55$  on one of the factors, then this motive was not considered to be discrete. If the motive had a factor weight  $\geq .55$  on one of the factors, then this motive was considered to be discrete and was included in the analysis of that factor.

Of the 30 motives analyzed, four motives loaded on two factors with neither factor weight being  $\geq .55$ . These motives (to be popular, to get out of the house, to get exercise, and to have something to do) were not considered discrete and will not be discussed in data analysis. One motive (improve skills) loaded much more heavily on Factor 1 (.75) than Factor 2 (.45). This motive was considered discrete and will be included in Factor 1 analysis only. Two motives (to have fun and to do something I am good at) did not load on any of the eight factors and will not be discussed in data analysis.

Factor 1 loaded on five motives and was labeled Skill and Fitness Development (SF). The five motives were to improve skills, to learn new skills, to be physically fit, to go to a higher level, and to stay in shape. Factor 2 loaded on four motives and was labeled Team-Oriented (TO). The four motives were team spirit, teamwork, being on a team, and like the coaches or instructors. Factor 3 loaded on three motives

Table 2  
Factor Analysis Findings

Motive	Factors							
	1(SF)	2(TO)	3(AS)	4(ER)	5(SS)	6(CO)	7(SI)	8(AE)
Improve skills	.75							
Learn new skills	.72	.45						
Physically fit	.69							
Higher level	.67							
Stay in shape	.62							
Team spirit		.80						
Teamwork		.78						
Being on a team		.72						
Coaches or instructors		.47						
Win			.79					
Rewards			.74					
Feel important			.59					
Popular			.54		.47			
Something I'm good at								
Get rid of energy				.74				
Release tension				.72				
Get out of the house				.54			.47	



Table 2 (continued)

## Factor Analysis Findings

Motive	Factors							
	1(SF)	2(TO)	3(AS)	4(ER)	5(SS)	6(CO)	7(SI)	8(AE)
Get exercise	.47			.52				
Something to do				.52			.49	
Be with friends					.64			
Meet new friends					.58			
Travel					.51			
Gain status or recognition						.48		
Challenge						.80		
Compete						.79		
Equipment or facilities							.78	
Parents/friends want me to								.47
Action								.70
Excitement								.69
Fun								
Eigenvalue	6.52	2.96	2.32	1.99	1.75	1.30	1.09	1.01
Percent of Variance	10.0	9.5	8.7	8.6	6.6	6.4	6.1	6.1

and was labeled Achievement Status (AS). The three motives were to win, to gain rewards, and to feel important. Factor 4 loaded on two motives, get rid of energy and release tension, and was labeled Energy Release (ER). Factor 5 loaded on five motives and was labeled Social Status (SS). The five motives were to be with friends, to meet new friends, to travel, to gain status, and to be popular. Factor 6 loaded on two motives, challenge and to compete, and was labeled Competition (CO). Factor 7 loaded on two motives, equipment or facilities and parents or close friends want me to play, and was labeled Situation (SI). Factor 8 loaded on two motives, action and excitement, and was labeled Action-Excitement (AE).

Factor rating scores (FRS) for each factor were calculated by summing the means of the motives loading on the factor, then dividing by the number of motives on the factor. Factors were then ranked from highest to lowest by FRS. Results are given in Table 3. Factors ranking in order of highest to lowest FRS were AE, CO, SF, TO, AS, ER, SS, and SI.

#### Gender Analysis

Separate FRS were calculated for males and females, and the results are given in Table 4. Results indicated both males and females ranked the AE and CO factors highest and the ER and SI factors lowest. Further, the FRS indicated that males rated the AE, CO, SS, AS, and SI factors higher, and females rated the TO, SF, and ER factors higher.

The next step was to determine if these differences between males and females were significant.  $\chi^2$  tests were performed to test the null hypothesis that there would be no significant difference

Table 3  
FRS and Rank Order of Factors

Factor	<u>FRS</u>
Action-Excitement	4.42
Competition	4.37
Skill and Fitness	4.34
Team-Oriented	4.13
Achievement Status	3.51
Energy Release	3.31
Social Status	3.17
Situation	3.05

Table 4  
FRS and  $t$ -test Scores for Gender

Factor	<u>Female</u> ( $n = 93$ )	<u>Male</u> ( $n = 87$ )	$t$
Action-Excitement	4.36	4.49	1.37
Competition	4.29	4.45	1.65
Team-Oriented	4.19	4.06	1.35
Skill and Fitness	4.04	3.97	.94
Social Status	2.82	3.03	1.98 *
Achievement Status	2.78	3.25	4.47 *
Energy Release	2.33	2.12	2.59 *
Situation	2.17	2.28	1.11

\*  $p < .05$ .

between males and females in each of the eight identified factors.

Results are given in Table 4. Results revealed no significant difference ( $p > .05$ ) between males and females in the factors of AE, CO, TO, SF, and SI factors. Thus, the null hypothesis was accepted for these factors. Results revealed significant differences for the factors SS,  $t(179) = 1.98$ ,  $p < .05$ ; AS,  $t(179) = 4.47$ ,  $p < .05$ ; and ER,  $t(179) = 2.59$ ,  $p < .05$ . The null hypothesis was rejected for these factors. The FRS revealed that males rated the SS and AS factors significantly higher, while females rated the ER factor significantly higher.

The first hypothesis in chapter I stated that there will be no significant gender differences in participation motives. Significant differences were revealed in the AS, SS, and ER factors. Thus, this hypothesis was rejected.

#### Age Analysis

Separate FRS were calculated for each of the three age groups: group 1 = 11-13 years, group 2 = 14-15 years, and group 3 = 16-18 years, and the results are given in Table 5. The results indicated that all groups ranked the AE and CO factors highest and the ER and SI factors lowest. Further, the FRS for each factor indicated a variety of differences between age groups.

The next step was to determine if these differences between the age groups were significant. Univariate analysis of variance (ANOVA) techniques were performed to test the null hypothesis that there will be no significant age differences in each of the eight identified factors.

Results (see Table 5) revealed no significant age differences

Table 5  
FRS and ANOVA for Age Groups

Factor	Groups			F
	1	2	3	
	( $\bar{n}$ = 49)	( $\bar{n}$ = 55)	( $\bar{n}$ = 76)	
Action-Excitement	4.42	4.43	4.42	.00
Competition	4.43	4.37	4.31	.43
Team-Oriented	4.09	4.08	4.18	.48
Skill and Fitness	4.07	4.00	3.97	.59
Social Status	3.09	2.86	2.85	2.11
Achievement Status	2.96	3.05	3.02	2.00
Energy Release	2.27	2.27	2.13	1.18
Situation	2.27	2.25	2.17	.44

( $p > .05$ ) in any of the eight factors. Thus, the null hypothesis was accepted for each of the eight factors.

The second hypothesis in chapter 1 stated that there will be no significant age differences in participation motives. No significant differences were revealed, therefore, this hypothesis was accepted.

### Skill Level Analysis

Separate FRS were calculated for each of the three skill levels: highly-skilled athlete (HSA), average-skilled athlete (ASA), below-average skilled athlete (BAA), and the results are given in Table 6. Results indicated that all skill levels ranked the AE and CO factors highest and the ER and SI factors lowest. Further, the FRS for each factor indicated a variety of differences between the skill levels.

The next step was to determine if these differences between skill levels were significant. Univariate ANOVA techniques were performed to test the null hypothesis that there will be no significant skill level differences in each of the eight identified factors.

Results (see Table 6) revealed no significant skill level differences ( $p > .05$ ) in the factors of SF, SS, AS, ER, and SI. Thus, the null hypothesis was accepted for these factors. Results revealed significant differences for the factors AE,  $F(3, 177) = 4.60$ ,  $p < .05$ ; CO,  $F(3, 177) = 4.76$ ,  $p < .05$ ; and TO,  $F(3, 177) = 4.98$ ,  $p < .05$ . The null hypothesis was rejected for these factors.

Newman-Keuls tests were used to specifically locate the skill level differences in FRS in the AE, CO, and TO factors. The results (see Table 7) revealed that BAA rated the CO and TO factor significantly lower than HSA and ASA and the AE factor significantly lower than HSA.

Table 6  
FRS and ANOVA for Skill Levels

Factor	Skill Level			F
	HSA ( <u>n</u> = 74)	ASA ( <u>n</u> = 79)	BAA ( <u>n</u> = 27)	
Action-Excitement	4.58	4.36	4.19	4.60 *
Competition	4.49	4.36	4.06	4.76 *
Team-Oriented	4.23	4.14	3.80	4.98 *
Skill and Fitness	4.06	4.00	3.85	1.51
Social Status	2.89	2.96	2.86	.30
Achievement Status	3.07	2.98	2.97	.37
Energy Release	2.22	2.25	2.20	.07
Situation	2.17	2.27	2.24	.48

\*  $p < .05$ .



Table 7  
Newman-Keuls Test for Skill Levels

Action-Excitement			
Skill Level	HSA	ASA	BAA
FRS	4.58	4.36	4.19
Newman-Keuls	A	A & B	B
Competition			
Skill Level	HSA	ASA	BAA
FRS	4.49	4.36	4.06
Newman-Keuls	A	A	B
Team-Oriented			
Skill Level	HSA	ASA	BAA
FRS	4.23	4.14	3.80
Newman-Keuls	A	A	B

The third hypothesis in chapter 1 stated that there will be no significant skill level differences in participation motives. The significant differences were revealed in the AE, CO, and TO factors. Thus, this hypothesis was rejected.

### Frequency of Competition Analysis

Separate FRS were calculated for each of the three frequency of competition groups (FCG): group 1 = 1 program, group 2 = 2 programs, and group 3 = 3 programs. The results are given in Table 8. Results indicated that all FCG ranked the AE and CO factors highest and the ER and SI factors lowest. Further, the FRS for each factor indicated a variety of differences between the FCG.

The next step was to determine if these differences between FCG were significant. Univariate ANOVA techniques were performed to test the null hypothesis that there will be no significant frequency of competition differences in each of the eight identified factors.

Results (see Table 8) revealed no significant frequency of competition differences ( $p > .05$ ) in the factors of CO, TO, SF, SS, ER, and SI. Thus, the null hypothesis was accepted for these factors. Results revealed significant differences for the factors AE,  $F(3, 177) = 4.12$ ,  $p < .05$ , and AS,  $F(3, 177) = 3.36$ ,  $p < .05$ . The null hypothesis was rejected for these factors.

Newman-Keuls tests were used to specifically locate the frequency of competition differences in FRS in the AE and AS factors. Results (see Table 9) revealed that group 1 rated the AE factor significantly lower than groups 2 and 3 and the AS factor significantly lower than group 3.

Table 8  
FRS and ANOVA for FCG

Factor	Groups			F
	1	2	3	
	( <u>n</u> = 30)	( <u>n</u> = 74)	( <u>n</u> = 76)	
Action-Excitement	4.13	4.45	4.51	4.12*
Competition	4.25	4.31	4.47	1.77
Team-Oriented	4.05	4.03	4.25	2.72
Skill and Fitness	3.98	3.99	4.03	.14
Social Status	2.80	2.89	2.99	.86
Achievement Status	2.73	2.98	3.14	3.36*
Energy Release	2.32	2.19	2.23	.70
Situation	2.39	2.22	2.16	1.34

\* $p < .05$ .

Table 9  
Newman-Keuls Test for FCG

Action-Excitement			
Skill Level	HSA	ASA	BAA
FRS	4.13	4.45	4.51
Newman-Keuls	B	A	A
Achievement Status			
Skill Level	HSA	ASA	BAA
FRS	2.73	2.98	3.14
Newman-Keuls	B	B & A	A

The fourth hypothesis in chapter 1 stated that there will be no significant frequency of competition differences in participation motives. Significant differences were revealed in the AE and AS factors. Thus, this hypothesis was rejected.

### Summary

Mean ratings of the 30 participation motives ranged from 4.58 to 2.37. The five most highly rated motives for youth soccer participants were to have fun, to stay in shape, to be physically fit, to improve skills, and to experience excitement.

Exploratory factor analysis using principal components analysis with varimax rotations were performed to identify eight factors of participation motives, and FRS were calculated for each. The eight factors in order of highest to lowest FRS were AE, CO, SF, TO, AS, ER, SS, and SI.

I tests were used to reveal the significant difference between males and females in the eight factors. The significant differences revealed were males rated the SS and AS factors higher than females, and females rated the ER factor higher than males. The first hypothesis in chapter 1 was rejected.

Univariate ANOVA techniques were used to reveal significant age differences in the eight factors. No significant differences ( $p > .05$ ) between age groups were revealed, and the second hypothesis in chapter 1 was accepted.

Univariate ANOVA techniques were used to reveal significant skill level differences in the eight factors. Significant differences ( $p < .05$ ) were revealed in the AE, CO, and TO factors. Newman-Keuls

tests were performed to specifically locate these differences. Results revealed that BAA rated the TO and CO factors significantly lower than HSA and ASA and the AE factor significantly lower than HSA. The third hypothesis in chapter 1 was rejected.

Univariate ANOVA techniques were used to reveal significant frequency of competition differences in the eight factors. Significant differences ( $p < .05$ ) were revealed in the AE and AS factors. Newman-Keuls tests were performed to specifically locate these differences. Results indicated that group 1 rated the AE factor lower than groups 2 and 3, and the AS factor lower than group 3. The fourth hypothesis in chapter 1 was rejected.

Results revealed that significant differences in the factor rating scores of the eight factors existed between genders, skill levels, and frequency of competition groups, but not between age groups.

## Chapter 5

### DISCUSSION OF RESULTS

The results presented in chapter 4 will be discussed in this chapter. The chapter is divided into the following sections: (a) mean importance ratings, (b) factor analysis, (c) gender analysis, (d) age analysis, (e) skill level analysis, (f) frequency of competition analysis, and (g) summary.

#### Motive Analysis

The means and standard deviations were calculated for each of the 30 motives, and the motives were ranked from highest to lowest representing the most important to the least important. The five most important motives were to have fun, to stay in shape, to be physically fit, to improve skills, and to experience excitement. The motive to have fun was ranked as most important. These findings were similar to those of previous studies using the Participation Motives Questionnaire (PMQ) (Gill, Gross, & Huddleston, 1983; Gould, Feltz, & Weiss, 1985; Klint & Weiss, 1986). Participants in these studies also ranked the fun, skill development, and fitness motives as most important. Further, other researchers (Henschen, 1986; McPherson, Marteniuk, Tihanyi, & Clark, 1980; Ogilvie & Howe, 1986; Scanlan & Passer, 1980; Weick, 1975), using a variety of instruments, also found that fun, fitness, and skill development were the most important motives for participation.

The five least important motives were to travel, to release tension, to be popular, to get rid of energy, and parents or close friends

want me to play. These findings were identical to those of Gould et al. (1985).

These results have some implications for coaches. First, it appears that coaches should provide ample opportunities for all their athletes to experience fun and excitement both in games and in practices (Rarick & Seefeldt, 1977). Second, the results suggest that coaches could not only provide opportunities for improvement of current skills, but could continue to challenge their athletes with new, more advanced skills as well. Third, the results support the need for coaches to structure practices to ensure that the athletes' level of fitness is being maintained. Fortunately, the current trend in soccer is to combine all fitness training with skill development. This allows the coaches to make fitness training more interesting for the athletes.

#### Factor Analysis

Exploratory factor analysis using principal components analysis and varimax rotation was used to identify eight factors of motives and factor rating scores (FRS) were calculated for each. The factors ranked in order of highest to lowest representing the most important to least important were Action-Excitement (AE), Competition (CO), Skill and Fitness Development (SF), Team-Oriented (TO), Achievement Status (AS), Energy Release (ER), Social Status (SS), and Situation (SI). These results were similar to those of previous PMQ studies (Gill et al., 1983; Gould et al., 1985) and earlier studies on attitudes toward physical activity (Alderman, 1970; Kenyon, 1968).

The AS, TO, SI, ER, and SS factors were nearly identical to those factors in studies by Gill et al. (1983) and Gould et al. (1985).



Further, the AS, SS, AE, SF, and ER factors were very similar to the ascetic (competitive experience), social (meeting social needs), vertigo (excitement and risk), health and fitness (enhancing personal health), and catharsis (release tension) subdomains found in related attitude toward physical activity studies by Alderman (1970) and Kenyon (1968).

The SF factor in this investigation was different from previous PMQ studies. The motives loading on this factor loaded on two separate factors of skill development and fitness in studies by Gill et al. (1983) and Gould et al. (1985). The latest trend in soccer training techniques can be used to explain this unusual loading. The new direction in soccer is to combine skill development with fitness training. It is rare to see athletes developing their level of fitness without the use of a ball as these two elements are no longer considered separate in soccer training. Thus, the combination of these two elements of training would account for the combination of these two sets of motives loading onto one factor.

Results revealed that the motive to have fun did not heavily load on one of the eight factors, which is similar to the findings by Gould et al. (1985). The motive to have fun loaded on one factor in the study by Gill et al. (1983) and loaded onto two factors in the study by Klint and Weiss (1986). The motive to have fun may be important to all of the factors making it unlikely to discriminately load onto just one factor. For this reason, Passer (1981) suggested that the motive to have fun be considered a separate motive rather than associated with one specific factor.

Coaches should note that the two most important factors were the

AE and CO factors. This finding suggests that coaches, when structuring their practices, should ensure that all of their players have the opportunity for action and excitement. Particular attention should be paid to those athletes who receive little playing time in an actual game. Competitive and challenging practice situations could be structured in a manner that would allow the athletes' locus of causality to remain internal (Vallerand, Deci, & Ryan, 1987). To accomplish this, coaches could emphasize the athlete competing with himself/herself rather than with teammates. For example, coaches can challenge their athletes to increase their total number of juggles by one each day rather than to challenge them by inquiring as to who can do the most juggles. This will ensure that the athletes' locus of causality does not shift from internal to external and result in a decrease in intrinsic motivation (Vallerand et al., 1987).

#### Gender Analysis

T tests were used to reveal significant differences between males and females in each of the eight factors. Significant differences ( $p < .05$ ) were found in the AS, SS, and ER factors.

Results revealed that males rated the AS factor significantly higher in importance than females, and females rated the ER factor significantly higher in importance than males. These findings were similar to previous studies by Gill et al. (1983), Gould et al. (1985), and Weick (1975).

Results revealed that males rated the SS factor significantly higher in importance than females. This finding is contrary to previous studies by Gill et al. (1983), Gould et al. (1985), and Weick (1975).

An examination of the motives loading on this factor reveals a possible explanation. The motive to gain status (which males tend to rate higher in importance) loaded on the SS factor rather than the AS factor as in previous studies (Gill et al. 1983; Gould et al. 1985). Further, Seefeldt, Gilliam, Blievernicht, and Bruce (1978) suggested that a higher social status for males can be dependent upon their achievement in sports and indicated that males would value social status as much as achievement.

These results have some implications for coaches. First, coaches could create opportunities for males to experience success without overemphasizing winning (Gerson, 1977). Coaches can accomplish this by emphasizing the quality of performance rather than the outcome of performance. This can be accomplished by encouraging the athletes to set goals pertaining to the skill or tactical elements of the game (e.g., shooting with the left foot). The athletes' focus should then be on obtaining these goals rather than winning. Second, males need to be rewarded for successful performances. Kleiber (1981) and Weinberg (1981) suggested that the reward give accurate feedback concerning the athletes' level of ability and reinforce the athletes' self-worth. This reward does not have to be elaborate. It can be as simple as verbal feedback from the coach. Third, coaches can create special opportunities for social interaction among teammates, especially for females. Finally, coaches need to create ample opportunity for movement (energy release) in practices, especially for females.

#### Age Analysis

Univariate analysis of variance (ANOVA) techniques revealed no

significant age differences ( $p > .05$ ) in any of the eight factors. These findings were consistent with findings by Gould et al. (1985).

Coaches should note that all three age groups rated the AE and CO factors as most important. Coaches need to create opportunities for athletes of all ages to experience action, excitement, challenge, and competition (without overemphasizing winning). Further, as the athletes grow older, coaches need to continue to offer opportunities for skill development and advancement.

#### Skill Level Analysis

Univariate ANOVA techniques revealed significant skill level differences in the eight factors. Although some similarities existed, significant differences ( $p < .05$ ) were found in the AE, CO, and TO factors. These findings were contrary to those of Gould et al. (1985) who found no significant differences between skill levels.

The differences centered around the athletes of below-average skill (BAA). Athletes in this group rated the CO and TO factors lower in importance than both the highly-skilled athletes (HSA) and the average-skilled athletes (ASA). The BAA also rated the AE factor lower in importance than the HSA.

These results can be interpreted in different ways. Generally, the BAA experience less playing time in both games and practices than the ASA and the HSA. It is not uncommon to have these athletes feel that they are not a part of the team because they do not contribute in the games. This would account for the TO factor being rated lower in importance. Additionally, it would seem logical for this group to rate the AE factor lower in importance as they would experience less action

and excitement than the more skilled athletes that receive more playing time. Further, coaches need to look at the level of challenges and competition (the CO factor) they present to the BAA. Many coaches tend to center their challenges around pushing the HSA on to higher levels without adapting these challenges to meet the needs of the BAA. The BAA can easily become overwhelmed by challenges and competition rather than intrinsically motivated by them.

These results have several implications for coaches. First, coaches need to give as much playing time to the BAA as possible so they can experience the action and excitement of the game and feel like they are contributing members of the team. Second, coaches can assign the BAA to leadership positions. These athletes could have the responsibility of leading warm-ups or starting a drill. This can be very effective in helping the BAA to feel that they are contributing to the team. Third, coaches should design realistic challenges for the BAA. Practice sessions could have drill adaptations to allow the BAA to experience success rather than to be overwhelmed. When substituting, coaches may find it useful to surround the BAA with higher skilled athletes who can assist the BAA.

#### Frequency of Competition

Univariate ANOVA techniques were used to reveal significant frequency of competition differences ( $p < .05$ ). Although there were many similarities, significant differences ( $p < .05$ ) were found in the AE and AS factors. At the time of this investigation, no other studies concerning frequency of competition were available for comparison.

Specifically, athletes who participated only in the fall

interscholastic season rated the AE factor significantly lower in importance than those who participated in either one or two additional seasons. Further, the fall season athletes rated the AS factor lower in importance than those who participated in two additional seasons.

Currently the trend in soccer is to develop a successful program by encouraging the athletes to play all year (additional seasons beyond the fall interscholastic season). Using this trend as a guide, the results were interpreted to yield the following suggestions for coaches. First, coaches could structure their additional seasons (winter indoor and summer recreation) so that all athletes receive ample (if not equal) playing time. This would make these additional seasons more attractive and intrinsically motivating for the athletes. Second, coaches could provide opportunities for all athletes to achieve without overemphasizing winning. This can be achieved by allowing the athletes to compete (on a limited, informal basis) in indoor tournaments and summer soccer league games. By structuring additional seasons in this manner, coaches can make additional competition more attractive and intrinsically motivating for a greater number of athletes.

### Summary

Descriptive statistics, exploratory factor analysis, and univariate techniques yielded results that were similar to those of previous studies on participation motives.

Descriptive statistics revealed that motives relating to fun, skill development, and fitness were rated most important by the athletes in this investigation. Fun, which is considered to be a motive rather than a factor, was rated highest in importance in this investigation.

Coaches, when structuring their practices, should provide ample opportunities for all their athletes to experience fun both in games and practices. Further, coaches can make fitness training more interesting by combining it with skill development.

Factor analysis results supported the concept that motives can be grouped into general categories of motives. The eight factors in order of most important to least important were AE, CO, SF, AS, ER, SS, and SI. Coaches need to ensure ample opportunities for all their athletes to experience action and excitement in both practices and games. Further, coaches can structure competitive situations so that the athletes are competing with themselves rather than teammates.

Results revealed that males rated the AS and SS factors higher in importance than females, and females rated the ER factor high in importance than males. These results suggest that coaches need to create opportunities for males to experience success and to reward males for successful performances. Also, coaches should create special opportunities for social interaction both on and off the field, especially for females.

Results revealed that there were no significant differences between age groups in any of the eight factors. Consequently, coaches need to continue to offer opportunities for action, excitement, challenge, competition, and skill development as the athletes age.

Results revealed that significant differences centered around the BAA who rated the AE, CO, and TO factors lower in importance than the HSA and the ASA. The coaches can give the BAA as much playing time as possible and adapt their training techniques to allow them to

experience more success in competitive situations.

Results revealed that significant differences between FCG were found in the AE and AS factors. Coaches can use this information to make additional competition more attractive to their athletes. First, coaches could provide ample (if not equal) playing time to all athletes involved in additional programs. Second, coaches could provide competition in these programs by scheduling indoor tournaments and summer league games.

Generally, the results in this investigation were similar to findings in related research. These results offer several suggestions for coaches for the improvement of their coaching methods.



## Chapter 6

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER STUDY

#### Summary

This investigation sought to determine the participation motives of youth soccer athletes and the relationship of gender, age, skill level, and frequency of competition to those motives. Subjects ( $N = 180$ ) were administered the Participation Motives Questionnaire (PMQ) and a personal background questionnaire (PBQ).

Mean importance ratings of the 30 participation motives ranged from 4.58 to 2.37. The five most important motives for youth soccer participants were to have fun, to stay in shape, to be physically fit, to improve skills, and to experience excitement.

Exploratory factor analysis using principal components analysis with varimax rotations were performed to identify eight factors of participation motives, and factor rating scores (FRS) were calculated for each. The eight factors in order of most important to least important were Action-Excitement (AE), Competition (CO), Skill and Fitness Development (SF), Team-Oriented (TO), Achievement Status (AS), Energy Release (ER), Social Status (SS), and Situation (SI).

T tests were used to reveal the significant differences between males and females in the eight factors. The significant differences ( $p < .05$ ) revealed were that males rated the AS and SS factors higher in importance, and females rated the ER factor higher in importance.

Univariate analysis of variance (ANOVA) techniques were used to reveal significant age differences in the eight factors. No significant

differences ( $p > .05$ ) were revealed.

Univariate ANOVA techniques were used to reveal significant skill level differences in the eight factors. Significant differences ( $p < .05$ ) were revealed in the AE, CO, and TO factors. Newman-Keuls tests were performed to specifically locate these differences. Results revealed that the below-average athletes (BAA) rated the TO and CO factors significantly lower in importance than the highly-skilled athletes (HSA) and the average-skilled athletes (ASA). Further, the BAA rated the AE factor significantly lower in importance than the HSA.

Univariate ANOVA techniques were used to reveal significant frequency of competition differences in the eight factors. Significant differences ( $p < .05$ ) were revealed in the AE and AS factors. Newman-Keuls tests were performed to specifically locate these differences. Results revealed that the athletes that only competed in the fall interscholastic season rated the AE factor lower in importance than athletes that competed in one or two additional seasons and the AS factor lower in importance than athletes that competed all year.

Results revealed that significant differences in the importance of the eight factors existed between genders, skill levels, and frequency of competition groups, but not between age groups.

### Conclusions

The results of this investigation yielded the following conclusions regarding participation motives and the relationship of gender, age, skill level, and frequency of competition to those motives:

1. The most important motives for youth soccer athletes are fun (the most important), skill development, and fitness.

2. Motives of participation can be grouped into general categories or factors. The eight factors identified in order of most important to least important are AE, CO, SF, TO, AS, ER, SS, and SI.

3. Gender is a significant variable in the importance ratings of the SS, AS, and ER factors. Males rated the AS and SS factors higher in importance than females, and females rated the ER factor higher in importance than males.

4. Age is not a significant variable as there were no significant differences between age groups in any of the eight factors.

5. Skill level is a significant variable in the importance ratings of the AE, CO, and TO factors. The BAA rated the CO and TO factors lower in importance than the HSA and the ASA and the AE factor lower in importance than the HSA.

6. Frequency of competition is a significant variable in the importance ratings of the AE and AS factors. Athletes that participate only in the fall interscholastic season rated the AE factor lower in importance than athletes that participated in either one or two additional seasons. These athletes also rated the AS factor lower in importance than those that participated on a year around basis.

#### Recommendations for Further Study

The following recommendations for future study were made upon completion of this investigation:

1. A study should be conducted with athletes from other sports in order to assess the motives for each of those sports.
2. A study should be conducted to compare the motives of team sport athletes to those of individual sport athletes.

3. A study should be conducted with athletes from various parts of the country to assess geographic differences.
4. A study should be conducted to compare the motives of athletes under the age of 18 years to those over the age of 18 years.
5. A similar study on a larger scale should be conducted so that each variable can be subjected to a separate factor analysis.

Appendix A  
PRINCIPAL'S LETTER

Dear Principal,

I am Terry Febrey, and I am the girls' soccer coach at Wayne Central High School. Currently, I am finishing my Master's degree in sport psychology at Ithaca College. As a part of my graduation requirement, I am conducting a study on young soccer athletes.

The purpose of this study is to find out the reasons why young athletes play soccer, and to see what will influence these reasons. For example, will age influence these reasons? This information can then be used as a guide for coaches to structure their methods to ensure that their players' needs are being satisfied. By increasing the players' satisfaction, it is hoped that they will play soccer longer.

With your agreement, I would like to ask your soccer coaches and players if they would like to participate in this study. If your coaches agree to participate, they will be asked to assist with the following:

- (a) Assembly and supervision of players at the testing site.
- (b) Distribution and collection of parental consent forms (i.e., permission forms). I will be obtaining parental consent before asking the players if they would like to participate.
- (c) Evaluation of the skill level of each player. This rating will be kept confidential, and players will not know this process is being conducted.

If the players agree to participate, they will be asked to complete the following two questionnaires:

## Appendix A (continued)

(1) Participation Motives Questionnaire: This 30-item questionnaire is being used to find the reasons why young athletes play soccer. It will contain such statements as I PLAY SOCCER BECAUSE:

- I like to have fun.
- I want to improve my skills.
- I want to stay in shape.

The players will be asked to rate how important each statement is to them.

(2) Personal background questionnaire: This 6-item questionnaire is being used to gather information about the players' ages, gender, how often they play soccer, how many years they have played soccer, and what other sports they play.

Players will be able to finish both in 45 minutes or less. An alternate activity will be provided for those who do not wish to participate in this study. This study will take place at your school during one of the indoor soccer practices or prior to one of the games.

Both the participation of the coaches and players is voluntary. Even after they have agreed to participate, either can change their mind and stop at any time. There are no apparent physical, psychological, or social risks for anyone participating in this study.

All information will be kept confidential. No one will know the names of the athletes, coaches, or schools participating. The only people who will be looking at the players' individual answers will be myself, Dr. Wuest, and Dr. Eskridge of Ithaca College. All information will be analyzed on a group basis rather than an individual basis.

## Appendix A (continued)

Information gathered will be used only for the purpose of this study.

If you agree to having this study conducted at your school, please sign the attached form. Also, if you would like me to notify other school administrators, please list them on this form.

If you have any questions about this study, you can call me at Wayne Central High School (315) 524-2811, or at home (716) 265-0128. I thank you for your consideration in this matter.

Sincerely,

Terry Febrey

PO Box 52

Union Hill, N.Y.

14563

I have read the above letter, understand it, and agree to having this study conducted in my school.

---

Signature

---

Date

Please list below any other school administrators you would like me to notify.

## Appendix B

### INFORMED CONSENT FORM (COACH)

1. (a) Purpose of the study. The purpose of this study is to find out the reasons why young athletes play soccer, and to see what will influence these reasons. For example, will age influence these reasons?  
(b) Benefits. This information can then be used as a guide for coaches to structure their methods to ensure that their players' needs are being satisfied. By increasing the players' satisfaction, it is hoped that they will play soccer longer.
2. Method. I would like to ask for your assistance as outlined below.

(a) I would like your permission to ask your players if they would like to participate. If your players agree to participate, they will be asked to complete the following two questionnaires:

(1) Participation Motives Questionnaire: This 30-item questionnaire is being used to find the reasons why young athletes play soccer. It will contain such statements as I PLAY SOCCER BECAUSE:

- I like to have fun.
- I want to improve my skills.
- I want to stay in shape.

Your player will be asked to rate how important each statement is to him/her.

(2) Personal background questionnaire: This 6-item questionnaire is being used to gather information about your

Initial\_\_\_\_\_



## Appendix B (continued)

players' ages, gender, how often they play soccer, how many years they have played soccer, and what other sports they play.

Players will be able to finish both in 45 minutes or less.

This study will take place at your school during one of the indoor soccer practices or prior to one of the games (at your convenience).

(b) I will need your assistance in assembling and supervising players at the testing site. You will be asked to arrange for a testing site on your school grounds and notify players of this date, place, and time. During the testing period, I will need you to supervise an alternate activity for those who do not wish to participate in this study. These players will assemble in the gym to participate in either a small sided game, or a camp skill game (10-point leg pass, head/catch, dribble tag, or knock out). The activity selected will be dependent upon the number of players in the gym.

(c) I will need your assistance in distributing and collecting informed consent forms (parental permission forms) to and from your players' parents.

(d) I will need your assistance in rating the skill level of each of your players. The following 3-point scale will be used.

(1) Highly-skilled athlete: Plays 75-100% of a game and must be a starter. Has or will be receiving skill recognitions such as All-County, most valuable player, State Select, or Empire State Games participant.

Initial\_\_\_\_\_

## Appendix B (continued)

(2) Average-skilled athlete: Plays 25-74% of a game and may or may not be a starter. Has not or will not be receiving skill recognitions.

(3) Below-average skilled athlete: Plays less than 25% of a game and will not be a starter.

The skill rating procedure is to be kept confidential. Your players must not know that their skill is being evaluated.

In order to ensure confidentiality, I will be collecting this information from you one day prior to the testing date.

Total time commitment for coaches will be 2 hours.

3. Will this hurt ? There are no apparent physical, psychological, or social risks for anyone participating in this study.
4. Need more information ? If you have any questions about this study, you can call Terry Febrey at Wayne Central High School (315) 524-2811, or at home (716) 265-0128.
5. Withdrawal from the study . Both your participation and your players' participation is voluntary. Even after you and your players have agreed to participate, either can change their mind and stop at any time.
6. Will the data be maintained in confidence ? All information will be kept confidential. No one will know the names of the athletes, coaches, or schools participating. The only people who will be looking at your players' individual

Initial\_\_\_\_\_

## Appendix B (continued)

answers will be myself, Dr. Wuest, and Dr. Eskridge of Ithaca College. All information will be analyzed on a group basis rather than an individual basis. Information gathered will be used only for the purpose of this study.

7. In the space provided, initial each page to indicate that you have read, and understand the contents of each page.

I have read the above, understand it, and agree to:

- (a) participate in the skill rating procedure of this study,
- (b) give you my permission to ask my players if they would like to participate, and
- (c) assist you in this study as outlined above.

I acknowledge that I am 18 years of age or older.

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Signature

---

Date

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School

## Appendix B (continued)

I have obtained your principal's approval on this study. Are there any other school administrators you would like to have approve this study? If so, please write their name and title here.

Terry Febrey

PO Box 52

Union Hill, N. Y.

14563

Appendix C  
INFORMED CONSENT FORM (PARENT)

Dear Soccer Parent,

My name is Terry Febrey, and I am the girls' soccer coach at Wayne Central High School. Currently, I am finishing my Master's degree in sport psychology at Ithaca College. As a part of my graduation requirement, I am conducting a study to find out why young athletes play soccer, and to see what will influence these reasons. For example, will age influence these reasons? This information can then be used as a guide for coaches to ensure that their players' needs are being satisfied. By increasing the players' satisfaction, it is hoped that they will play soccer longer.

I have discussed this study with the school's principal and your child's coach. Both have agreed to allow me to ask your child if he/she would like to volunteer to participate. However, before I can ask your child, I must obtain your parental permission.

Enclosed is an informed consent form (parental permission form) that explains the purpose, procedures, and confidentiality of this study. After you have read the form, please take a moment to discuss the study with your child, and ask him/her if she would like to participate. After your discussion, please check the appropriate response, sign your name, place it in the envelope provided, and have your child return it to the coach.

## Appendix C (continued)

If you have any questions, please feel free to call me at the numbers below. I thank you for your consideration and cooperation in this matter.

Sincerely,

Work: (315) 524-2811 (Wayne Central)

Home: (716) 265-0128

Terry Febrey

PO Box 52

Union Hill, N. Y.

14563

## Appendix C (continued)

## INFORMED CONSENT FORM (PARENT)

1. (a) Purpose of the study. The purpose of this study is to find out the reasons why young athletes play soccer, and to see what will influence these reasons. For example, will age influence these reasons?

(b) Benefits. This information can then be used as a guide for coaches to structure their methods to ensure that their players' needs are being satisfied. By increasing the players' satisfaction, it is hoped that they will play soccer longer.

2. Method. I would like your permission to ask your child if he/she would like to participate in this study. If your child agrees to participate, he/she will be asked to complete the following two questionnaires:

(a) Participation Motives Questionnaire: This 30-item questionnaire is being used to find out the reasons why young athletes play soccer. It will contain such statements as

I PLAY SOCCER BECAUSE:

- I like to have fun.
- I want to improve my skills.
- I want to stay in shape.

Your child will be asked to rate how important each statement is to him/her.

Initial\_\_\_\_\_

## Appendix C (continued)

(b) Personal background questionnaire: This 6-item questionnaire is being used to gather information about your child's age, gender, how often he/she plays soccer, how many years he/she has played soccer, and what other sports he/she plays.

Your child will be able to finish both in 45 minutes or less.

This study will take place at your child's school during one of the indoor practices or prior to one of the games.

3. Will this hurt ? There are no apparent physical, psychological, or social risks for anyone participating in this study.
4. Need more information ? If you have any questions about this study, you can call Terry Febrey at Wayne Central High School (315) 524-2811, or at home (716) 265-0128.
5. Withdrawal from the study . Your child's participation is voluntary. Even after your child has agreed to participate, he/she can change his/her mind and stop at any time.
6. Will the data be maintained in confidence ? All information will be kept confidential. No one will know the names of the athletes, coaches, or schools participating. The only people who will be looking at your child's individual answers will be myself, Dr. Wuest, and Dr. Eskridge of Ithaca

Initial\_\_\_\_\_



## Appendix C (continued)

College. All information will be analyzed on a group basis rather than an individual basis. Information gathered will be used only for the purpose of this study.

7. In the space provided, initial all pages to indicate that you have read, and understand the contents of that page.

I have read the above, I understand it, and:

\_\_\_\_\_ (a) give you permission to ask my child if he/she would like to participate in this study.

\_\_\_\_\_ (b) would not like my child to participate in this study.

I acknowledge that I am 18 years of age or older.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Child's name

Terry Febrey  
PO Box 52  
Union Hill, N. Y.  
14563

## Appendix D

### INFORMED CONSENT FORM (ATHLETE)

1. (a) Purpose of the study. The purpose of this study is to find out the reasons why young athletes play soccer, and to see what will influence these reasons. For example, will age influence these reasons?  
(b) Benefits. This information can then be used as a guide for coaches to structure their methods to ensure that their players' needs are being satisfied. By increasing the players' satisfaction, it is hoped that they will play soccer longer.
2. Method. I am asking you to help in this research effort. As a participant, you will be asked to complete the following two questionnaires:  
(a) Participation Motives Questionnaire: This 30-item questionnaire is being used to find out the reasons why young athletes play soccer.  
(b) Personal background questionnaire: This 6-item questionnaire is being used to gather information about your age, gender, how often you play soccer, how many years you have played soccer, and what other sports you play.  
You will be able to finish both in 45 minutes or less.
3. Will this hurt ? There are no apparent physical, psychological, or social risks for anyone participating in this study.
4. Need more information ? If you have any questions about this study, you can call Terry Febrey at Wayne Central High School

Initial\_\_\_\_\_

## Appendix D (continued)

(315) 524-2811, or at home (716) 265-0128.

5. Withdrawal from the study. Participation is voluntary. Even after you have agreed to participate, you can change your mind and stop at any time.
6. Will the data be maintained in confidence ? All information will be kept confidential. No one will know the names of the athletes, coaches, or schools participating. The only people who will be looking at your individual answers will be myself, Dr. Wuest, and Dr. Eskridge of Ithaca College. All information will be analyzed on a group basis rather than an individual basis. Information gathered will be used only for the purpose of this study.
7. In the space provided, initial the previous page to indicate that you have read and understand the contents of that page.

I have read the above, I understand it, and agree to participate in this study.

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Signature

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Date

Terry Febrey  
PO Box 52  
Union Hill, N. Y.  
14563

## Appendix E

### PARTICIPATION MOTIVES QUESTIONNAIRE

DO NOT PLACE YOUR NAME ON THE ANSWER SHEET

#### DIRECTIONS

Below are 30 reasons for playing soccer. Carefully read each reason, then use the following scale to rate how important this reason is to you.

5 = very important (VI)

4 = important (I)

3 = a little important (A)

2 = not very important (NV)

1 = not important at all (NA)

Circle the appropriate response on your questionnaire. If you wish to change your answer, completely erase your previous answer and circle your new answer. Check to make sure you have rated each reason. If you have a question, please feel free to ask at any time. You may take as much time as you need.

After you have finished both questionnaires, place all of your papers in the envelope and seal it. Please hand your envelope to the coach.

## Appendix E (continued)

	VI	I	A	NV	NA
I PLAY SOCCER BECAUSE:					
1. I want to improve my skills.	5	4	3	2	1
2. I want to be with my friends.	5	4	3	2	1
3. I like to win.	5	4	3	2	1
4. I want to get rid of energy.	5	4	3	2	1
5. I like to travel.	5	4	3	2	1
6. I want to stay in shape.	5	4	3	2	1
7. I like the excitement.	5	4	3	2	1
8. I like the teamwork.	5	4	3	2	1
9. I want to learn new skills.	5	4	3	2	1
10. I like to meet new friends.	5	4	3	2	1
11. I like to do something I'm good at.	5	4	3	2	1
12. I want to release tension.	5	4	3	2	1
13. I like the rewards.	5	4	3	2	1
14. I like to get exercise.	5	4	3	2	1
15. I like to have something to do.	5	4	3	2	1
16. I like the action.	5	4	3	2	1
17. I like the team spirit.	5	4	3	2	1
18. I like to get out of the house.	5	4	3	2	1
19. I like to compete.	5	4	3	2	1
20. I like to feel important.	5	4	3	2	1
21. I like being on a team.	5	4	3	2	1
22. I want to go to a higher level.	5	4	3	2	1

## Appendix E (continued)

	VI	I	A	NV	NA
23. I want to be physically fit.	5	4	3	2	1
24. I want to be popular.	5	4	3	2	1
25. I like the challenge.	5	4	3	2	1
26. I like the coaches or instructors.	5	4	3	2	1
27. I want to gain status or recognition.	5	4	3	2	1
28. I like to have fun.	5	4	3	2	1
29. I like to use the equipment or facilities.	5	4	3	2	1
30. My parents or close friends want me to play.	5	4	3	2	1

Appendix F

PERSONAL BACKGROUND QUESTIONNAIRE

DO NOT PLACE YOUR NAME ON THIS PAGE

Please answer each item below.

1. \_\_\_\_\_ How old are you? (in years.)
2. \_\_\_\_\_ Are you male or female? (Write M or F in space provided.)
3. \_\_\_\_\_ Did you play in an indoor soccer program last winter?  
(yes/no)
4. \_\_\_\_\_ Did you play in a summer soccer program this summer?  
(yes/no)
5. \_\_\_\_\_ Counting this year as one, how many years have you played on a soccer team? (This can be any kind of soccer team. For example, school team, recreation team, travel team, etc.)
6. \_\_\_\_\_ Have you played on sport teams other than soccer? (yes/no)  
If you answered yes, please list the kind of sport, and how many years you played on that sport team under the headings below (see example).

<u>Kind of sport</u>	<u>Number of years played</u>
Example: Basketball team	2 years

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